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January 10, 2003

Samuel C. Miller, III  
Burns, Doane, Swecker & Mathis, LLP  
P.O. Box 1404  
Alexandria VA 22313-1404

RE: United States Patent Application Publication 2001/0032559, October 25, 1991 "Inking Systems For Printing Presses"; Price et al.

Dear Mr. Miller:

I am writing on behalf of Mr. James E. Taylor, who directed research and development activities for Dahlgren Manufacturing Co. and Dahlgren International Co. and subsequently served in sales administration and as technical manager for Dahlgren USA. Mr. Taylor then worked as requested for Dahlgren International. Mr. Taylor is presently fully retired from Dahlgren.

Mr. Taylor developed concepts for keyless inking systems in the late 1980's and the early and mid 1990's. I enclose documentation of some of those concepts. The enclosed document is a facsimile transmitted from Mr. Taylor to Mr. Paul Belair on August 3, 1995, including a cover sheet and a memorandum dated August 2, 1995 titled "New Inker Project". The memorandum is from Mr. Taylor to Mr. Belair, Mr. James F. Price and Mr. Mark DiRico. The facsimile cover sheet references Mr. Taylor's sketches that Mr. Price had delivered to Mr. Belair "yesterday", which, we believe, was August 2, 1995.

In summary, Mr. Taylor is responsible for the concepts in the August 2, 1995 memorandum, and he transmitted his ideas to Mr. Price and others.

I have studied just one of Mr. Taylor's concepts (the "Alternative Ink Metering Methods", illustrated in the figure that is on the last page of the memorandum, and is reproduced below).



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DELAWARE

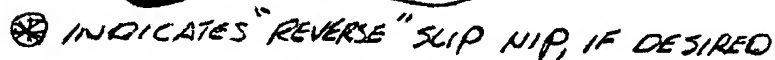
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WASHINGTON, DC



The table below compares Mr. Taylor's alternative ink metering methods, shown in the figure at page 6 of the memorandum, to claim 20 of the above-captioned US 2001/32559. The memorandum remains unchanged from August 1995, except that I have added letters referenced in the table to identify certain features in the figure on page 6.

<b>Claim 20 of '559 Publication</b>	<b>8/2/95 Memorandum</b>
A keyless inking system comprising:	The entire memorandum concerns keyless inking systems. See, for example, the introduction under "III. Goal" which references "keyless inking systems, especially w/viscous inks..."
a single form roller;	The page-6-figure shows a single form roller, which I have labeled "A".

<b>Claim 20 of '559 Publication (cont.)</b>	<b>8/2/95 Memorandum (cont.)</b>
an ink reservoir;	The page-6-figure shows an ink reservoir, which I have labeled "B"
an applicator roller for applying ink to the form roller, the surface of the applicator roller having wells, which are interconnected by channels;	The page-6-figure shows an applicator roller, which I have labeled "C", for applying ink to form roller A. The applicator roller is specified as an "engraved anilox or similar roll..." In addition, the bottom of the page-6-figure, the roll is characterized as "like LPC". This is a Dahlgren short hand well known to both Mr. Taylor, Mr. Price and others as the "litho plus coater", as described in U.S. patents 4,934,305 and 5,178,678. As detailed in those patents and as was well known to those familiar with the LPC, the anilox roll used is manufactured by Pamarco and has a "roto-flo engraved surface" which has channels that interconnect the wells.
a doctor blade for metering ink from the reservoir onto the applicator roller; and	The page-6-figure shows a doctor blade "D" for metering ink from the reservoir onto applicator roller C.
means for varying the rotational speed of the applicator roller to vary the amount of ink applied to the form roller.	Applicator roller C is driven by an "ELECT. OR HYD. V.S. DRIVE MTR", i.e., an electric or hydraulic variable speed drive motor, which I have labeled "E".

As shown above, there is no question that Mr. Taylor is at least a co inventor of the subject matter claimed in the '559 publication.

In addition to what is shown above, my conversations with Mr. Taylor indicate that there are many more instances of information that Mr. Price derived from Mr. Taylor and included in the claims of this application, but I want to keep this exchange brief and to the point.

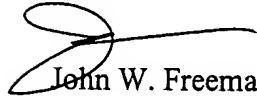
One example relates to claim 22 of the '559 publication featuring a subtractive roller system. The page-6-figure shows a subtractive roller system (which I have labeled "F") for removing excess ink from the form roller.

Relative to claim 23, the ink reservoir B in the page-6-figure receives excess ink from subtractive roller system F. Relative to claim 29, the speed of the applicator roller C in the page-6-figure may be increased or decreased with drive motor E to change the amount of ink applied to form roller A. Note the figure specifies a VS (variable speed) motor

Based on the information above, please add Mr. Taylor as a co inventor to this application.

I look forward to your response.

Very truly yours,



John W. Freeman, Esq.

JWF/nxp

AUGUST 3, 1995

TRANSMISSION REPORT

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617/424-7483 (FA)

RE: PROMISHELD FAX

Dear Paul

This is in <sup>a</sup> more readable form and a summary  
of all the sketches Jim P. brought to you yesterday.  
Please call if you have questions.

~ ~ ~

Regards  
Jim Taylor

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FAX NO. (214) 245-0768

DATE: 8/13/95

TO: WESTIN HOTEL (COPLEY PLACE)

ATTN: PAUL BELAIZ (HOTEL GUEST AS OF TODAY)

FAX NO. 617/424-7483

PERSONAL & CONFIDENTIAL

FROM: JIM TAYLOR

617/262-9600 (PH.)

" 1424-7483 (FAX)

NUMBER OF PAGES INCLUDING THIS ONE 7

RE: PROMISED FAX

Dear Paul,

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To: Paul / Mark / Jim

James E. Taylor  
Aug. 2, 1998

FROM: J.E. TAYLOR

"CONFIDENTIAL"

SUBJECT: "PRINTING PRESS SINGLE ROLL INKER"  
(KEYLESS / WATERLESS) <sup>KEYLESS</sup>

I. ADVANTAGES & BENEFITS OVER PRIOR DAHLGREN INKER

A. FROM THIS DAY FORWARD

1. OFFERS ALL ADVANTAGES OF WATERLESS  
PRINTING (W/O DAMPENER)

- a) INK-WATER BALANCE NOT REQD.
- b) FAST MAKE-READY - LESS START-UP WASTE
- c) LESS SPOILAGE THRU THE RUN
- d) INCREASED PRODUCTIVITY
- e) FINE SCREENS CAN BE RUN TO 500 LPI.
- f) SKILLED WORKERS NOT REQD.
- g) LESS DOT GAIN - THINNER INK FILMS
- h) SHARPER PRINTING
- i) NO DAMPENER, DAMPENING CHEMISTRY, ETC.
- j) LESS DRY BACK PROBLEMS
- k) LESS COMPLICATED PROCESS - INK IS ONLY VARIABLE
- l) HIGHER INK CHARGES
- m) ADVANTAGES W/ NON-ABSORBENT SUBSTRATES
- n) CONSISTANT COLOR
- o) LESS REGISTER PROBLEMS W/O WATER
- p) CAN PROCESS ALMOST ALL PAPER GRADES  
& CARTONS.
- q) LOW VISCOSITY INKS & TEMP. CONTROL ALLOW  
UNCOATED STOCKS TO BE PRINTED.

2. ADVANTAGES SPECIFIC TO <sup>"OLD"</sup> DAHLGREN DESIGNS:

- a) WATER-LESS (NO DAMPENER OR WATER INK  
CONTAMINATION PROBLEMS (SEE 1 ABOVE)
- b) INK FORM ROLL DAMAGE & DEGRADATION  
ELIMINATED (BLADE METERING & REVERSE  
ROLL METERING ELIMINATED)
- c) FORM ROLL DRIVE IS SIMPLIFIED & SMOOTH
- d) EXISTING INKER FRAMES USED
- e) SIMPLE - INEXPENSIVE
- f) CAN HAVE TEST UNIT QUICKLY ON GOING

- g) EXISTING PRESS INK VIBRATORS USED
- h) " " INKER USED (WHEN MODIFIED)
- i) COULD RETROFIT EXISTING PRESSES MORE EASILY, IF DESIRED.

II. THE ABOVE ADVANTAGES CAN BE OBTAINED & HERE'S SOME IDEAS/THOUGHTS DATING BACK TO THE EARLY 90'S & LATE 80'S:

A. START FRESH W/O INVOLVEMENT OF OLD INKER DESIGNS, OLD R&D PRESS W/ INKER, OR PATENTS.

- 1.) USE OLD INKER DESIGN DUGS. ONLY AS REQD. & AS PROJECT PROGRESSES.
- 2.) SAME AS A.) ABOVE FOR OLD R&D PRESS & INKER.
- 3.) FILE NEW PATENTS AS REQUIRED FOR PROTECTION OF NEW TECHNOLOGY USED. (I WOULD LIKE THIS JOB!)
- 4.) USE OLD PATENTED TECHNOLOGY, AS NECESSARY, & OBTAIN LICENSE FROM PATENT OWNER(S) ONLY WHEN IT IS SEEN THAT UNEXPIRED PATENTS ARE INCORPORATED INTO THE NEW DESIGN.

B. FOR TESTING, <sup>ENTERTAIN THE</sup> <sup>GOOD</sup> USE OF AN INKER OF A MULTICOLOR 40" OR 50" PLANETA, MITSUBISHI, OR HARRIS PRESS, ETC. & REMOVE CERTAIN INK FORM ROLLS, HANGERS, ETC. THIS MODIFIED INKER <sup>NEW SINGLE</sup> CAN BE USED TO METER & APPLY INK TO THE <sup>NEW SINGLE</sup> FORM ROLL (INK KEYS LOCKED): (SEE SKETCH) REMOVE THE DAMPENER - THIS IS A "WATERLESS/KEYLESS" INKER.

- 1.) RESULTS CAN BE COMPARED WITH THE CONVENTIONAL INKER/DAMPENER OF ANOTHER UNIT OF THE SAME PRESS.
- 2.) REMOVE THE PRESENT DAMPENER FROM THE UNIT TO BE TESTED.
- 3.) REFRAIN FROM USING A REVERSE ANGLE INK METERING BLADE THAT HAS TO BE HEAVILY INDENTED INTO THE FORM ROLL FOR UNIFORMITY.
- 4.) THE MODIFIED INKER SHOULD INCORPORATE:
  - a) ONE (1) NEW LARGE SINGLE INK FORM ROLL
  - b) MOUNT FORM ROLL BETWEEN TWO (2) EXISTING PRESS DRIVEN <sup>COPPER</sup> OSCILLATING (VIBRATOR) ROLLS, WITH NEW FORM ROLL HANGER, PIVOTING ABOUT ONE OF THE VIBRATORS. USE AIR CYLINDERS ETC.



TO ACTUATE THE HANGER (WITH FORM ROLL)  
"ON" & SLIGHTLY "OFF" THE PLATE - WITH POSITIVELY  
ADJUSTABLE STOPS.

- c) ONE (1) NEW "SUBTRACTIVE" INK REMOVAL DEVICE  
DIRECTLY ON THE FORM ROLL (AFTER PRINTING),  
OR, ON ONE OF THE VIBRATOR ROLLS, OR, COMBI-  
NATION OF BOTH TO REMOVE ALL GHOSTING POSSIBILITIES,  
OR INK ACCUMULATION - STARVATION POSSIBILITIES.
- d) REROUTE ALL THE INK FROM THE MODIFIED INKER  
INK TRAIN TO THE NEW SINGLE FORM ROLL &/OR  
ONE VIBRATOR. (SEE SKETCH)
- e) OBTAIN A GOOD "STD." WATERLESS INK FOR TEST-  
ING & ALSO A NEW "NON-STD." WATERLESS INK  
WHICH IS LOW IN VISCOSITY.
- f) PROVIDE FOR COOLING OF THE TWO (2) INK  
VIBRATORS OF THE INKER BEING USED FOR TESTING.
- g) ADJUST INK KEYS FOR AN EVEN INK FILM  
& THEN "LOCK" EACH ONE; NEVER TO BE USED  
AGAIN DURING TESTING.
- h) COLLECT & PUMP INK REMOVED FROM THE  
FORM ROLL BACK TO THE INK FOUNTAIN, TO BE  
REUSED.
- i) AFTER TESTING USING THE MODIFIED INKER  
FOR METERING INK TO THE FORM ROLL, REMOVE  
THE INK FOUNTAIN, DUCTOR & ALL INKER ROLLS  
& TRY OTHER METHODS OF METERING & APPLYING  
INK TO THE NEW SINGLE INKING FORM ROLL.  
(SEE OTHER SKETCHES ENCLOSED)

### C. COMBINATIONS OF TEST. POSSIBILITIES:

#### 1. INK METERING

- a) MODIFIED CONVENTIONAL INK FOUNTAIN  
DESCRIBED ABOVE
- b) ANILOX ROLL W/ ENCLOSED INK FOUNTAIN  
OR W/ METERING ROLL (W/ ANILOX ROLL  
ADAPTED FOR FORWARD OR REVERSE ROTATION)
- \* - c) INK METERING MEMBER (BLADE)  
- WITH LIMITED THRESHOLD PRESSURE TO  
FORM ROLL & CHANGE ANGLE ON BLADE  
&/OR ANGLE OF BLADE RELATIVE TO ROLL FOR

SEE SKETCHES  
ATTACHED

INK FILM CONTROL.

- WITH LIGHT PRESSURE TO FORM ROLL W/ADJUSTMENTS FOR UNIFORMITY.

## 2. INK REMOVAL:

- BLADE IN LIGHT PRESSURE CONTACT TO F.R.
- " ON ONE INK VIBRATOR ROLL.
- COMBINATION OF a) & b) ABOVE.

## 3. FORM ROLL DRIVE

- THRU FRICTION FROM PRESS DRIVEN VIBRATOR(S).
- \* b) CHAIN (SILENT) OR GEAR DRIVE FROM PRESS. (HOWEVER, THESE CAN CAUSE STREAKS; ESP. GEARS.)
- c) INDEPENDENT MOTOR (HYD. OR ELECTRIC) W/ TACH FOLLOWING (\$ TRIM) BACK TO PRESS.
- d) VIBRATORS ABOVE (ALL a) PLUS c) "HELPER" TO APPLY CONSTANT TORQUE REQUIRED.

## 4. DAMPENER

- \* - a) SAME AS ON "OLD" INKER (I.E. TRANSFER ROLL CONTACTS F.R.)
- \* - b) MUST HAVE MEANS TO REMOVE \$/OR EVAPORATE OR MIX INK & WATER AS PER EXISTING INKER PATENTS; OR, USE NEWLY DEVELOPED TECHNOLOGY!

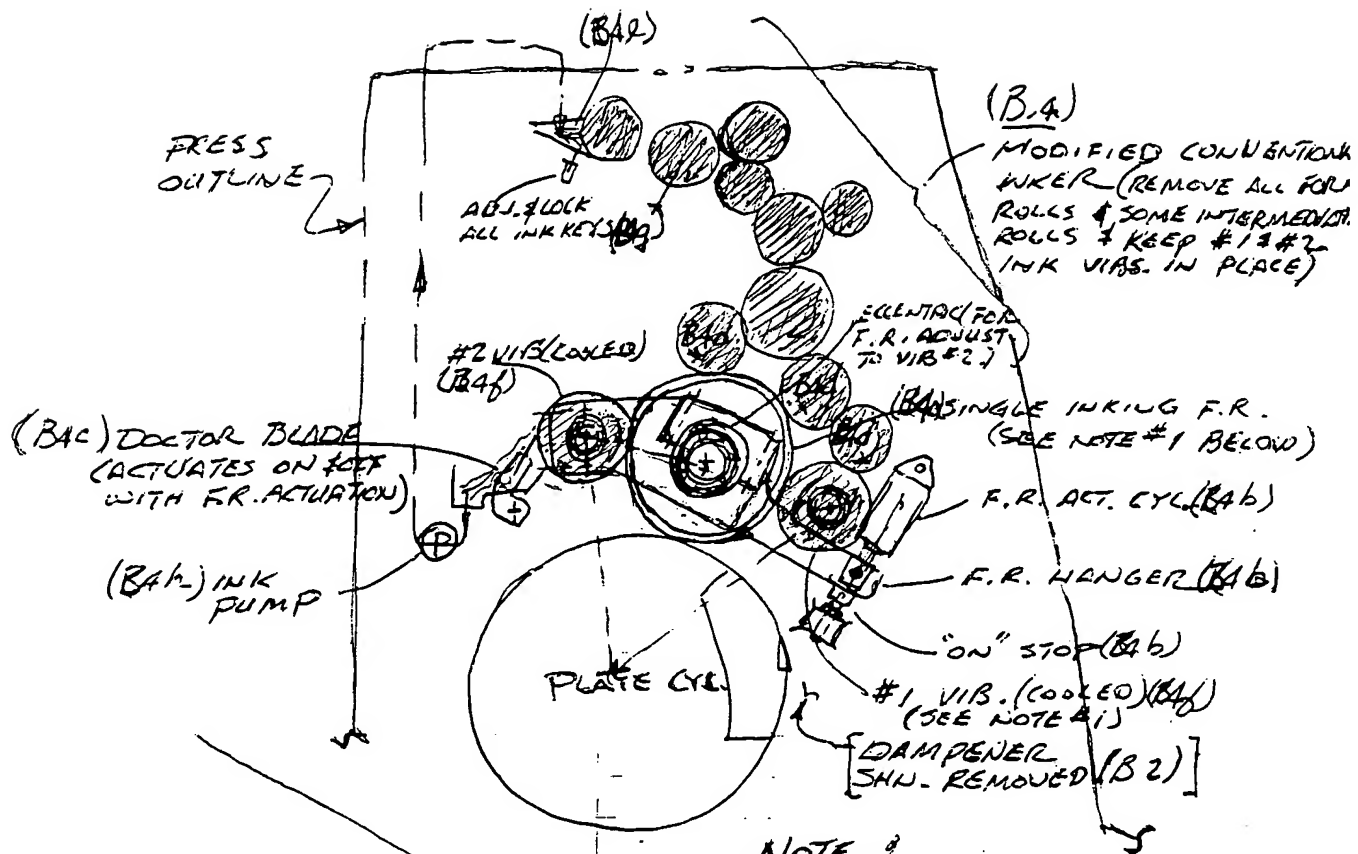
III. GOAL: THE FINAL PRODUCT SHOULD BE THE SIMPLEST SYS. TO DO THE JOB & SHOULD WORK FOR ALL <sup>ENT. & WEB</sup> OFFSET PRESSES.

\* I CAN PROVIDE OTHER DAHLGREN PATENTS FOR THIS MODE,

PLEASE  
NOTE:

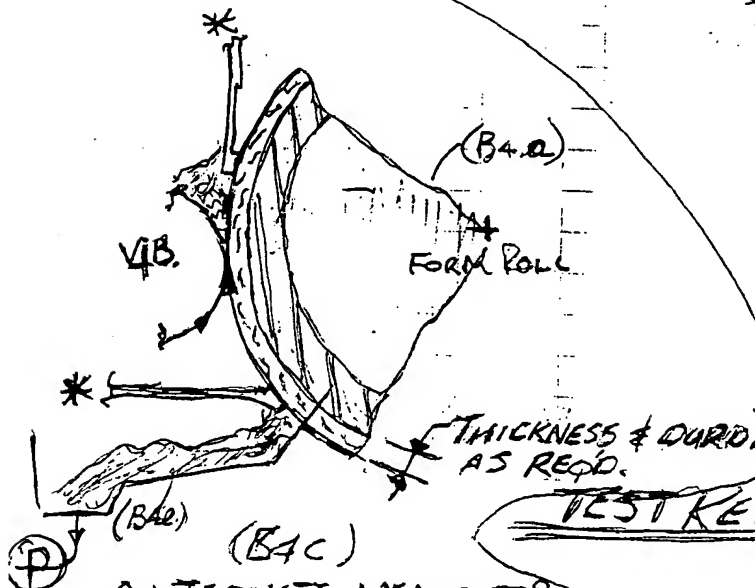
THIS MAY SOUND LIKE "BRAGGING" (OR "CONFESSING" PERHAPS), BUT I PROBABLY KNOW MORE ABOUT KEYLESS INKING THAN ANYONE, ESPECIALLY W/ VISCOUS INKS & CERTAINLY KNOW A LOT OF THINGS NOT TO DO! I SPENT TEN (10) YRS. OF MY LIFE ON THE VARIOUS KEYLESS INKING SYSTEMS DEVELOPED THRU THE YEARS IN R&D & FILED ALL PATENTS, ETC. THE 10 YRS. WAS ONGOING & EVERY DAY!

I WANT TO & CAN HELP IN DESIGN, <sup>CONCEPTS,</sup> TESTING & EVALUATION & PATENTS ALTHOUGH I CAN'T NOW WORK FULL TIME AS BEFORE. IF I CAN BE OF HELP AS A CONSULTANT (OR WHATEVER) I'D LIKE TO BE INVOLVED. MY CONTRIBUTION CAN BE USING MY PAST, ~~EX~~ <sup>EXP</sup> PERIENCE & IN FILING & PROSECUTING OF PATENTS & Thanks, <sup>John</sup> ~~Frank~~



### NOTE:

1. F.R. DIA. TO BE CALCULATED TO FIT BETWEEN EXISTING VIBS. & CONTACT RATE. ADD APPROX. .020" ON DIA. FOR STRIPING TO ADJACENT SURFACES. (ADD MEANS (SPEC. ECCENTRIC) ETC. AT VIB. #1 TO ALLOW VIB. #1 TO BE ADJUSTED TO F.R.)
2. SHADED ROLLS INDICATE CONVENTIONAL INKER ROLLS TO BE USED IN TESTS.

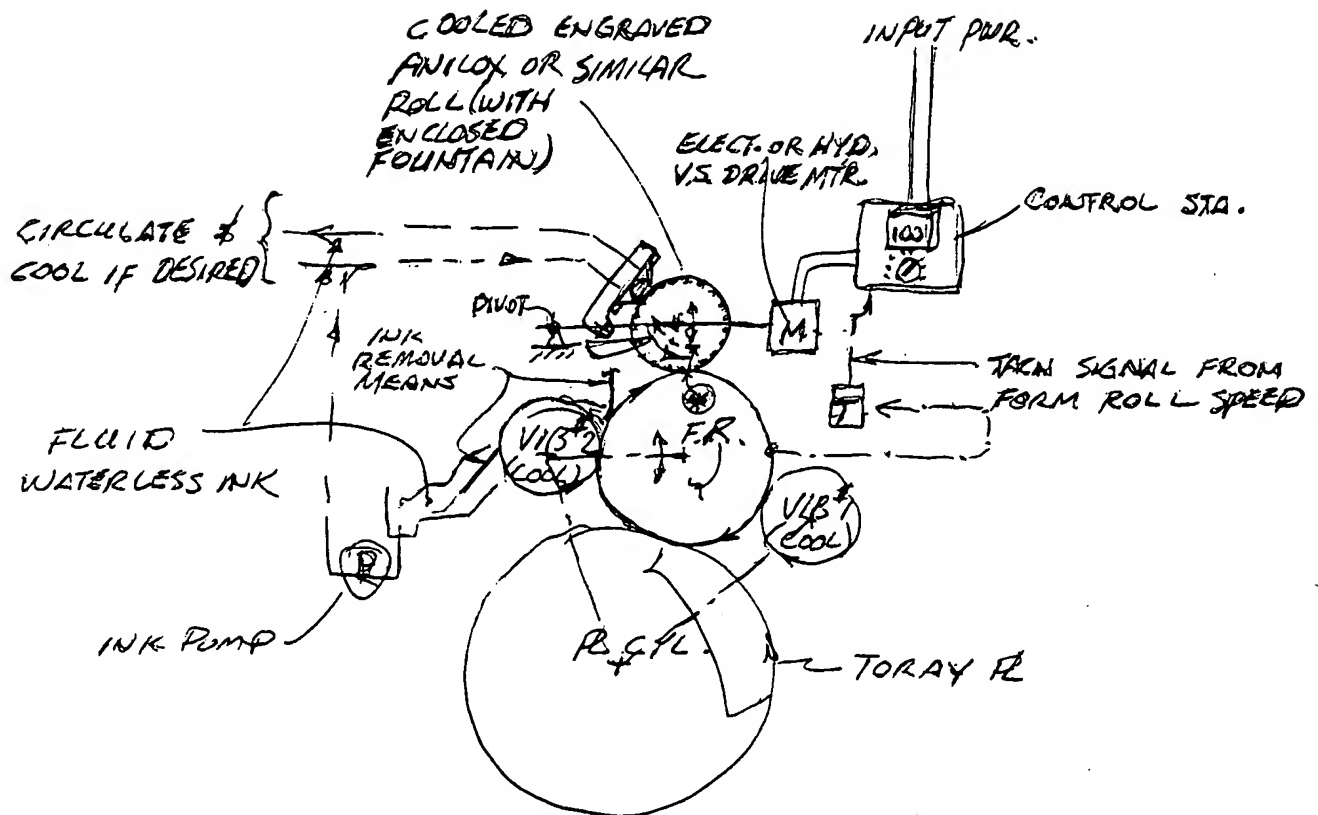


ALTERNATE MEANS FOR  
REMOVING EXCESS INK FROM  
FORM ROLL

TEST KEYLESS/WATERLESS INKER  
(SCHEMATIC-NOT TO SCALE)

J.E. TAYLOR  
8/95

\* INDICATES REV. & DOCTOR BLADE W/  
90° METERING SURF. W/ LT. PRESSURE CONTACT



⊗ INDICATES "REVERSE" SLIP NIP, IF DESIRED

INK  
ALTERNATE METERING METHOD(S)  
(MOUNTING FOR FORM ROLL &  
ANILOX ROLL CAN BE MOUNTED &  
ACTUATED IN COMMON FRAME & ADJUSTED  
& ACTUATED LIKE "LPC" J.E. TAYLOR  
IF DESIRED.) 8/95